

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

To:

see form PCT/ISA/220

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/IL2005/000137

International filing date (day/month/year)
04.02.2005

Priority date (day/month/year)

International Patent Classification (IPC) or both national classification and IPC
A61H1/02, A61H3/00, A63B23/035

Applicant
REABILITY INC.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☒ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material:
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing:
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/IL2005/000137

Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

- ☐ the entire international application,
- ☒ claims Nos. 41-52

because:

- ☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (*specify*):
- ☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. are so unclear that no meaningful opinion could be formed (*specify*):
- ☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.
- ☒ no international search report has been established for the whole application or for said claims Nos. 41-52
- ☐ the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:
 - the written form ☐ has not been furnished
 - ☐ does not comply with the standard
 - the computer readable form ☐ has not been furnished
 - ☐ does not comply with the standard
- ☐ the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-*bis* of the Administrative Instructions.
- ☐ See separate sheet for further details

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/IL2005/000137

Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	23, 35
	No: Claims	1-22, 24-34, 36-40
Inventive step (IS)	Yes: Claims	
	No: Claims	1-40
Industrial applicability (IA)	Yes: Claims	1-40
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item III

Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

Claims 41-52 relate to subject-matter considered by this Authority to be covered by the provisions of Rule 67.1(iv) PCT, namely to methods for treatment of the human or animal body by therapy. Consequently, no opinion will be formulated with respect to novelty, inventive step and industrial applicability of the subject-matter of these claims (Article 34(4)(a)(i), Rule 43bis.1(b) PCT).

In particular, independent method claim 41 includes medical treatment steps like coupling a patient to a rehabilitation system and performing a rehabilitation activity, the purpose and inevitable effect being therapeutic, namely rehabilitation of lost limb control.

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

I. Documents

Reference is made to the following documents:

D1: JP 02 102652 A;

D1': PATENT ABSTRACTS OF JAPAN vol. 014, no. 306 (C-0735), 3 July 1990
(English abstract of D1);

D2: US-A-5 397 865;

D3: US-A-5 846 086;

D4: EP-A-0 304 538;

D5: JP 2002 127058 A;

D5': PATENT ABSTRACTS OF JAPAN vol. 2002, no. 09, 4 September 2002
(English abstract of D5)

II. Requirements of Article 6 PCT - Clarity

1. The feature in independent claim 1 that the "controller is configured to correlate an audio output of said generator and said supported **motion**" relates to an intended use

of the apparatus without it being clear which structural features of the apparatus should thereby be defined or implied. Especially, it is not clear to which structural elements of the rehabilitation apparatus other than the audio output of the generator the controller is connected, and which are the input signals to the controller. The same applies to independent claim 37.

In addition, it is clear from the description that means for tracking the motion of a user are essential to the definition of the invention and necessary to solve the problem posed, namely to provide a device correlating motion and rhythmic audio or music. Since independent claim 1 does not contain this feature (see dependent claim 28) it does not meet the requirement following from Article 6 PCT taken in combination with Rule 6.3(b) PCT that any independent claim must contain all the technical features essential to the definition of the invention.

2. Since the term "rehabilitation information" is totally vague and has no generally acknowledged meaning in the present field, it is not clear what is meant in independent claim 37 by the definition that the "controller is adapted to correlate said audio and said movement **responsive to said rehabilitation information**".

The same applies to claims 13-17, 33: There is no pattern of movement that is generally acknowledged as being "correct", so much the more, as claim 1 is not restricted to any body part or type of movement.

3. According to the description, page 11, lines 1, 2 the rehabilitation apparatus is suitable for a user that is unable to control the limb, which means that in this case the movement is not only supported by the apparatus but entirely provided without participation of the user. Thus, the term "motion **support** element" used in claim 1 is not clear.
4. Several examples mentioned in the description do not necessarily comprise an audio generator or do not correlate audio and movement, and thus are not covered by independent claims 1, 37: See e.g. page 10, lines 15, 16; page 18, lines 10-12; page 24, lines 1-10 (correlation between movement and "points" instead of audio).

5. A plurality of dependent claims is totally vague and thus leaves the reader in doubt which additional structural features (cf. first sentence of Rule 6.4(a) PCT) are intended to be claimed. Further, numerous claims attempt to define the invention in terms of a result to be achieved, rather than defining the structural technical features that are necessary to achieve the stated result (Article 6 PCT; PCT International Search and Preliminary Examination Guidelines 5.35). See e.g. claims 16, 21-26, 29-32, 36.

III. Requirements of Article 33(2), (3) PCT - Novelty / Inventive step

1. Document D1 discloses (see especially the single Fig. and abstract D1') (the references in parentheses applying to this document):

A rehabilitation apparatus comprising at least one motion support element ((2) being e.g. a computer mouse) adapted to support a motion of a part of a human; a generator of rhythmic audio (34); and a controller configured to correlate an audio output of said generator and said supported motion (D1', last two sentences).

Since the subject-matter of independent **claim 1** does not differ therefrom, it is not novel (Article 33(2) PCT).

2. All additional and/or differing features of independent **claims 37** compared to claim 1 likewise being known from D1, the subject-matter of this claim also lacks novelty over D1 (Article 33(2) PCT):
 -) Rehabilitation information: See D1' "data of the real circle, which is stored in a memory 33".
 -) Sensor: See D1' "a position signal is sent from a position signal generator 2".
3. The subject-matter of independent **claims 1, 37** likewise is not new over the disclosure of each of the documents D2-D4 (see especially the relevant passages indicated in the Search Report).
4. Dependent **claims 2-36, 38-40** do not contain any additional features which, in combination with the features of any claim to which they refer, meet the requirements

of the PCT in respect of novelty and/or inventive step, since all additional features are either explicitly disclosed in at least one of the documents D1-D4 or just relate to normal design procedures in this field:

Claims 2-4, 13-20, 22-35, 38-40: See the already mentioned passages in D1-D4.

Claims 5, 6, 10-12: See e.g. D2, column 10, lines 44-56 and column 12, lines 24-28.

Claims 7-9: See especially D2, column 4, line 60 - column 5, line 4.

Claim 21: See e.g. D2, column 4, lines 20-26.

Claim 36: See e.g. D4, Fig. 7, "physical condition detector" (228).